#### **AMENDMENTS IN THE CLAIMS:**

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- 1. (currently amended) A recombinant adenovirus that mediates enhanced gene transfer to primary tumor cells, wherein said adenovirus comprises a fiber gene modified by introducing a ligand comprising a tripeptide having the sequence Arg-Gly-Asp (RGD) into the HI loop domain of the fiber knob, wherein said fiber knob and said fiber gene are from the same serotype.
- 2. (previously amended) The recombinant adenovirus of claim 1, wherein said adenovirus can achieve coxsackievirus and adenovirus receptor-independent gene transfer.
- 3. (original) The recombinant adenovirus of claim 1, wherein said adenovirus further comprises an additional modification to said fiber knob, thereby ablating the native tropism of said adenovirus.
- 4. (original) The recombinant adenovirus of claim 1, wherein said modified fiber knob retains its ability to trimerize and retains its native biosynthesis profile.

## 5-8. (canceled)

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9. (previously amended) The recombinant adenovirus of claim 1, wherein the adenoviral vector encoding said adenovirus further comprises a herpes simplex virus-thymidine kinase gene.

### 10. (canceled)

11. (currently amended) A method of killing tumor cells in an individual in need of such treatment, comprising the steps of:

administering to said individual injecting an effective amount of the recombinant adenovirus of claim 9 to the tumor in said individual; and

treating said individual with ganciclovir.

# 12-15. (canceled)

16. (currently amended) A method of increasing the ability of an adenovirus to transduce primary tumor cells *in vitro* or *ex vivo*, comprising the steps of:

modifying the fiber gene of said adenovirus by introducing a ligand comprising a tripeptide having the sequence Arg-Gly-Asp (RGD) into the HI loop domain of the fiber knob; and

transducing said primary tumor cells with said adenovirus, wherein said transduction results in enhanced gene transfer to said tumor cells.

#### 17-21. (canceled)

- 22. (previously amended) The method of claim 16, wherein said tumor cell is selected from the group consisting of cancer ascite samples and primary tumor explants.
- 23. (original) The method of claim 16, wherein the adenoviral vector encoding said adenovirus further comprises a therapeutic gene.